



# MAINE HEALTH DATA ORGANIZATION DATA COLLECTION OVERVIEW

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[www.maine.gov/mhdo](http://www.maine.gov/mhdo)  
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# MHDO Databases

- **Hospital data**
  - Inpatient
  - Outpatient
  - Emergency Department
  - Financial
  - Organizational
  - Quality Measures
- **Non-hospital ambulatory services data (1990 – 2004)**
- **All Payer/all provider healthcare Claims Data**



# Hospital Databases

- Hospital Inpatient
  - Data submitted by 41 Maine licensed hospitals
  - Approximately 165,000 patient level records/year
  - One of oldest public hospital databases in US
  - Data available from 1980
- Hospital Outpatient
  - Data submitted by 41 Maine licensed hospitals
  - Over 4,000,000 visit level records/year
  - Over 14,600,000 detail records/year
  - Only complete hospital outpatient database in US
  - Data available from 1998
- Hospital Emergency Department
  - Created from inpatient and outpatient data
  - Approximately 70,000 inpatient and 650,000 outpatient records/year
  - Data available from 2000



# Hospital Databases

- Hospital Financial Data

- Audited Financial Statements (parent & hospital entities)
- Medicare Cost Reports (as filed)
- Financial Data Template (hospital and parent entity)
- Supplemental Information (Gross Patient Service Revenue - inpatient & outpatient)
- Operating Expenses by salaries/wages & supplies & expenses
- Reported by Hospital Fiscal Year End date annually within 6 months of each hospitals Fiscal Year End date (21 month time frame)
- Data available from May 2000, Template 2/28/06 (Starting with hospital FY 05)
- Dollar transfers > \$100,000 between all hospital system entities, advertising expenditures, and salary + fringe information are new this year



# Hospital Databases

- **Baseline Information and Restructuring Occurrences for Maine Hospitals and Parent Entities**
  - Organizational chart depicting organizational structure and relationships in terms of ownership, control, and membership, and the individual corporate tax status, tax identification number, location, etc.
  - Hospital must file a chart depicting all physicians employed or owned by the hospital including names, department, name of group practice physician is associated
  - Must report restructuring occurrences, including acquisitions, consolidations, mergers, and reorganizations
  - Submitted January 1st & July 1st annually
  - Information available from October 9, 2006 (reported January 1st 2007)



# Quality Databases

- Quality Measures
  - Produced in conjunction with Maine Quality Forum
  - Data submitted by 41 Maine licensed hospitals
  - 47 measures collected:
    - 28 hospital quality CMS core measures (AMI, HF, PN, SCIP) (from 2005)
    - 14 nursing sensitive indicators (from 2006)
    - 5 healthcare associated infections (from 2007)
    - 3 care transition measures (from 2008)
    - 14 culture of patient safety (from 2009)



# All Payer/All Provider Claims Database

- Database contains:
  - Paid medical, dental, pharmacy claims files for all covered services rendered to publicly (Medicare Part A, B, C, D and Medicaid) and privately insured Maine residents
  - Eligibility (membership file)
  - Health care service provider files
  - Home grown procedure and taxonomy code files
- Standard format utilized:
  - HIPAA standard codes
  - HIPAA transaction set data elements (ASC X12N 270/271 eligibility, 835 remittance, 837 claims)



# APCD Included Information

- Information included in the database:
  - Type of product (HMO, POS, Indemnity, etc.)
  - Type of contract (single person, family, etc.)
  - Coverage type (self-funded, individual, small group, etc.)
  - Encrypted member social security numbers & names
  - Patient demographics (date of birth, gender, town of residence, relationship to subscriber)
  - Diagnosis codes (including E-codes)
  - Procedure codes (ICD, CPT, HCPC, CDT)
  - Groupers (DRG, APC)
  - NDC code / generic indicator





# APCD Included Information (continued)

- Revenue codes
- Service dates
- Service provider (name, tax id, payer ID, NPI, specialty code, city, state, zip code)
- Billing provider (name, payer ID, NPI)
- Prescribing physician
- Plan payments
- Member payment responsibility (co-pay, coinsurance, deductible)
- Date paid
- Type of bill
- Facility type



# APCD Excluded Information

- Information presently excluded from the database:
  - Services provided to uninsured (except ME Partners)
  - Denied claims
  - Workers' compensation claims
  - Services by Maine providers for non-Maine residents
  - Premium information
  - Capitation/administrative fees
  - Referrals
  - Test results from lab work, imaging, etc.
  - Provider affiliation with group practice
  - Provider networks



# APCD Missing Data

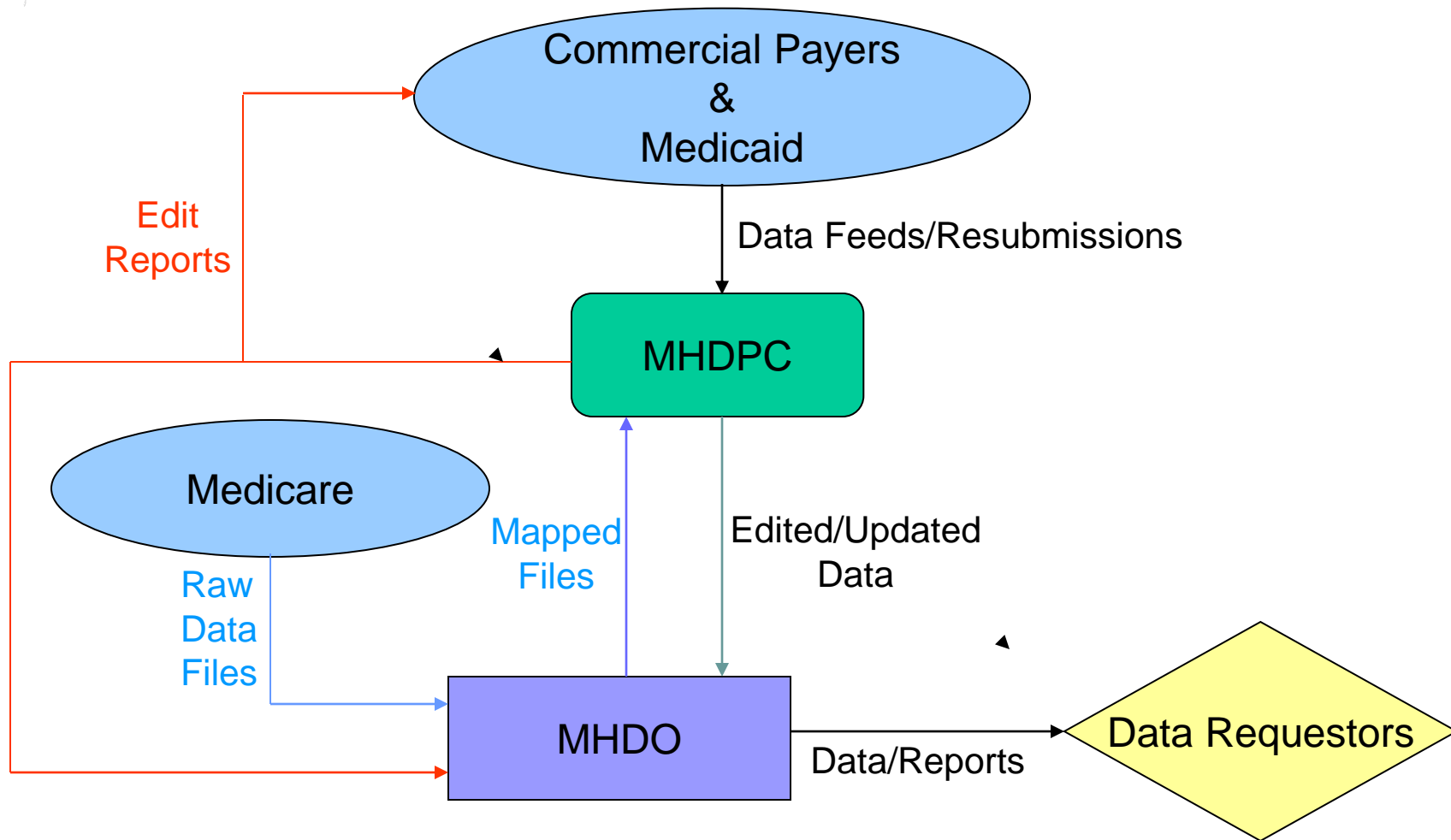
- Tricare and Federal Employees Health Benefit Program data not presently in database:
  - 14,000 federal employees in ME; active military population decreasing
  - Both are proprietary and under the auspices of the federal government
  - Pursuit of these data is currently on hold due to constrained resources
- ERISA preempted:
  - Self-funded / self-administered ERISA programs (e.g. – WalMart)
  - ERISA fiduciaries
  - Unions; private purchasing alliances



# Maine Health Data Processing Center

- Legislation passed in June of 2001 creating the Maine Health Data Processing Center (MHDPC)
- A public/private partnership between the Maine Health Data Organization (MHDO) and Onpoint Health Data (f/n/a the Maine Health Information Center)
  - Funding: 60% MHDO / 40% Onpoint
- Data submissions began in January, 2003
- First iteration (eighteen months 1/03 – 6/04) of data released in April, 2005 (all data retained and released by MHDO in accordance with Chapter 120 release rules)
- Currently, the MHDPC or Onpoint has contracts with the following states to collect and edit their claims data: MN, NH, and VT

# Maine APCD Claims Data Flow



# Data Submission/Processing Schedule

Data	Submission Schedules	Processing Times
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Hospital		
Quality	within 5 months of close of calendar quarter	90 days
Inpatient	within 90 days of close of calendar quarter	30 days
Outpatient	within 90 days of close of calendar quarter	90 days
ED	within 90 days of close of calendar quarter	90 days
Financial	6 months from end of hospital FY	90 days
Organizational	January 1st and July 1st of each calendar year	90 days
Claims		
Commercial	within 30 days after end of month, quarter, year	90 days
MaineCare	monthly - prior to the end of the month following the month in which claims were paid	90 days
Medicare	Part A, B - 9+ months after close of calendar year	90 days
	Part C, D - refer to commercial claims schedule	90 days



# Issues / Problems

- **HIPAA implementation failures:**
  - National patient ID does not exist (using encrypted SSN's and names to identify subscribers/members)
  - National payer ID not yet established (difficult to track mergers, buy outs, DBA's)



# Issues / Problems (continued)

- **National provider ID implementation issues resulting in additional complexities and expenses (\$200,000+ per year) requiring:**
  - Stripping information out of the claims and creating separate service provider files
  - Linking data using all possible data points and conducting manual review
  - Mapping individual payer provider specialty codes to national specialty taxonomy codes
  - Identifying substitution of service provider with billing provider





# Issues / Problems (continued)

- **Submission of global claims for hospital services involving hospital owned/employed physicians (50% in Maine):**
  - Claims submitted using UB 04 / 837 institutional standards
  - Contain both facility and physician components
  - Physician components included as lines in the claim
- **Resulting in:**
  - Inability to assign services to individual physicians - impacting processing and payment of claims, comparative quality analyses, and pay for performance initiatives
  - Inability to determine accurate total price paid for hospital services
  - Inefficient / costly use of administrative and analytical resources



# Issues / Problems (continued)

- **The effect of roles and responsibilities of other organizations can dramatically impact performance and MHDO's ability to deliver on tasks and outputs in a timely manner**
  - The MHDO works directly and indirectly with all entities required to submit claims data to assure timeliness and accuracy. This approach works well with the majority of commercial claims data but is challenged by the two government entities.
  - Medicare data is acquired via a DUA with CMS (Center for Medicare & Medicaid Services) and aside from the acquisition process and data layout issues, the data arrives as expected.
  - Medicaid (MaineCare) is at issue, in part due to backend data quality and system(s) changes/upgrades/issues. This said, the data once cleared as valid will flow on a timely basis.



# Issues / Problems (continued)

- **Factors that impact the quality, timeliness and output of components of the MHDO APCD.**
  - Data quality is directly dependent on the underlying data submitted to the MDHO. Beyond the current level of validation, contracted with the data collector, staff would be unaware issues exist until pointed out by those acquiring and analyzing the data.
  - Timeliness can be affected by data submitters schedules and data quality issues
  - Output of standard data requests have been available on or before schedule for several quarters



# Issues / Problems (continued)

- **The following structural changes are suggested to achieve a timely, reliable and quality APCD**
  - Fill the data manager position recommended in the Deloitte report.
  - An improvement to processing and analysis time may be realized by a comprehensive review/update of the current system design.
  - Delays in non-commercial claims data submission will benefit from a cooperative agreement with DHHS to provide the MHDO with accurate data, on schedule.
  - File layout changes present unique challenges. CMS allows their contracted vendor for Medicare claims data to determine the layout and naming conventions used in the extracts to the MHDO.
  - Introducing additional content specific resources (identified as qualified and available) when needed, will reduce delays.



# Issues / Problems (continued)

- **The following structural changes are suggested to achieve a timely, reliable, and quality APCD (continued)**
  - Introduce formal procedures for project management and change management.
  - Reliability and timeliness will be affected to a great degree as the process matures and procedures are refined.
  - Refine MHDO IT processes and procedures to move in the direction of known best practices.
  - Additional analysis at the MHDO prior to release, will assist to identify and thereby allow for correction of potential data quality issues.



# Merging Administrative and Clinical Data

- **Two models:**
  - Making the administrative and clinical databases relational
  - Attach the clinical data to the administrative data submissions
- **If relational, data collected must be consistent in both databases, with the following most critical:**
  - Provider ID – NPI or created number based upon multiple elements
  - Patient/member ID – double encrypted SSN or created number based upon multiple elements
- **Issues for MEHIN:**
  - Acquiring membership approval to merge clinical data with administrative data for public release
  - Having a database containing data on most patients and providers



# Merging Administrative and Clinical Data (continued)

- **If attached, systems generating data must be altered significantly:**
  - Providers will need to pull clinical data from separate systems for particular patients and services and merge with billing and medical records information
  - Payers do not currently receive clinical data through the claims adjudication process and will need to make major systems and business modifications
- **Issues for MHDO:**
  - Will need to modify data collection rules and IT systems to receive clinical data
  - Requiring submission of clinical data with administrative data will necessitate discussions with national standards organizations (NUBC, NUCC, ANSI, etc.)



# Data Release

- **Provides authority to establish terms and conditions of data release:**
  - No direct / indirect identification of patients (Ch. 125) – unless MHDO Board grants exception to DHHS for public health study
  - Identity of practitioners performing abortions protected
  - No release of data deemed confidential or privileged by MHDO – data providers may challenge designation
  - No release of data that places data provider at a competitive economic disadvantage (negotiated discounts)
  - Data providers may review all data requests, require additional information, and/or require further review prior to data release
  - Mandatory advisory committees required for all data requests containing identifiable practitioner data elements and group numbers